

## 2006 WASHINGTON STATE POPULATION SURVEY

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## The Uninsured Population in Washington State

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According to findings from the Washington State Population Survey<sup>2</sup> (SPS), the percentage of Washington residents without health insurance in 2006 remained about the same compared with 2004. About one in 11 Washingtonians is uninsured. The survey indicates that 9.3 percent of the population was uninsured in 2006, down from 9.9 percent in 2004. However, the change in percentage terms is not statistically significant.

Table 1 contains the number and percentage uninsured by family income as a percent of the Federal Poverty Level (FPL).<sup>3</sup> In 2006, 23.1 percent of those Washington residents with income below the FPL were uninsured, roughly the same as 2004 (the change in the rate is not statistically significant).<sup>4</sup>

Family Income as a Percent of the Federal Poverty Level	2004 SPS			2006 SPS		
	In Thousands		Percent Uninsured	In Thousands		Percent Uninsured
	Population	Number Uninsured		Population	Number Uninsured	
<b>0 – 99%</b>	986	225	22.8%	1,017	235	23.1%
<b>100 – 199%</b>	966	155	16.0%	936	155	16.6%
<b>200 – 299%</b>	971	118	12.2%	856	79	9.3%
<b>Over 300%</b>	3,245	112	3.5%	3,567	123	3.5%
<b>State Total</b>	<b>6,168</b>	<b>610</b>	<b>9.9%</b>	<b>6,376</b>	<b>593</b>	<b>9.3%</b>

The rate of the uninsured among near poor Washington residents (those between 100 and 199 percent of FPL) also remained roughly the same. The rate of uninsured among those with family incomes between 200 and 299 percent of FPL declined from 12.2 percent in 2004 to 9.3 percent in 2006 (this change is statistically significant at the five percent level). The uninsured rate among those with family incomes over 300 percent FPL remained constant from 2004 to 2006.

Employer and union sponsored insurance remained relatively constant between 2004 and 2006 (i.e. the increase was not statistically significant) (see Table 2). There was a 1.3 percentage point decrease (statistically significant at five percent level) in the percentage of individuals with individually purchased plans between 2004 and 2006. Medicare and Medicaid/Basic Health program coverage remained relatively steady at 13.0 percent and 15.6 percent respectively.

<sup>1</sup> The interpretation of two results changed between the first version and the revised version of this brief. The two results include: change in the rates of purchased insurance, and change in the rates of uninsurance among those with family incomes between 200% to 299% of FPL.

<sup>2</sup> Data cited are from the 2004 (v04) and 2006 (v02) Washington State Population Surveys. More information about the surveys is available at: <http://www.ofm.wa.gov/sps/default.asp>.

<sup>3</sup> In 2005, 100 percent of the Federal Poverty Level was \$19,806 for a married couple with two children (U.S. Census Bureau, "Poverty Thresholds, 2005." (<http://www.census.gov/hhes/www/poverty/threshld/thresh05.html>)).

<sup>4</sup> Researchers typically report differences in rates that are significant at the 1 or 5 percent level. A more detailed discussion of estimates, confidence intervals, and significance tests can be found in the Appendix at the end of this document.

**Table 2**

Type of Insurance	2004 SPS		2006 SPS		Change in Percent (2006-2004)*
	Number (in Thousands)	Percent of Total Population	Number (in Thousands)	Percent of Total Population	
<b>Private Insurance</b>					
<b>Employer Insurance</b>	3,770	61.1%	3,983	62.5%	1.3%
<b>Purchased</b>	765	12.4%	708	11.1%	<b>-1.3%</b>
<b>Public Insurance</b>					
<b>Medicaid/Basic Health</b>	958	15.5%	995	15.6%	0.1%
<b>Medicare</b>	794	12.9%	827	13.0%	0.1%
<b>Insured By Any Source (Public and/or Private) **</b>	5,558	90.1%	5,782	90.7%	0.6%
<b>Uninsured</b>	610	9.9%	593	9.3%	-0.6%
<b>State Population</b>	<b>6,168</b>		<b>6,383</b>		

\*Unless bolded changes in percent listed in this column are not statistically significant at the five percent level

\*\* In addition to the insurance sources listed, a person can be insured by military insurance, somebody outside the household, or by another type of plan (unspecified). A person can also have multiple forms of insurance, so total insured is not the sum of each insurance type.

Rates of insurance coverage vary by age (See Table 3). Between 2004 and 2006, the rate of uninsured decreased slightly for children and adults. However, neither change is statistically significant. Almost 7 out of eight uninsured persons in Washington are working age adults between 19 and 64 years of age, and approximately 73,000 of the uninsured are children.

**Table 3**

Age	2004 SPS			2006 SPS		
	In Thousands		Percent Uninsured	In Thousands		Percent Uninsured
	Population	Number Uninsured		Population	Number Uninsured	
<b>0 – 18</b>	1,612	95	5.9%	1,643	73	4.4%
<b>19 – 64</b>	3,850	513	13.3%	4,008	517	12.9%
<b>65 and Older</b>	706	3	0.4%	724	3	0.5%
<b>State Total</b>	<b>6,168</b>	<b>610</b>	<b>9.9%</b>	<b>6,376</b>	<b>593</b>	<b>9.3%</b>

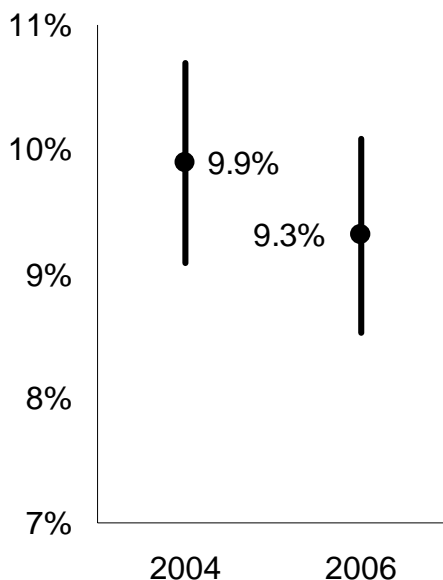
## Appendix

The 2006 and 2004 Washington State Population Surveys (WSPS)<sup>5</sup> contain results from two separate samples of Washington State's population. Results from the WSPS are presented as estimated rates, not actual population values. The estimated uninsured rate for all Washington residents in 2006 is 9.3 percent. This estimate was based on a random sample of approximately 7,000 households. It is important to quantify the uncertainty concerning the true rate of uninsured. The more detailed statistical results show that there is a 95 percent confidence that the true rate lies between 8.5 percent and 10.1 percent. This enables us to assess whether observed differences between this estimate and other estimates of the uninsured rates can be attributed to purely random fluctuations. Another randomly selected sample of the same size conducted at the same time with the same population would produce an estimate that lies somewhere outside this interval (8.5 percent to 10.1 percent) 5 percent of the time.

Figure A1 shows both the 2004 and 2006 estimates of the uninsured in Washington State. In 2004 the estimate for the uninsured in Washington was 9.9 percent. In 2006, the estimate for the uninsured in Washington State was 9.3 percent. A Wald chi-square test is used to test the null hypothesis that the uninsurance rates are the same in both 2004 and 2006. A p-value of less than .05 is the generally accepted standard indicating that one can reject the null hypothesis that the two rates are the same. The p-value for the Wald chi-square test (.302) indicates that one cannot conclude with confidence that there has in fact been a change in uninsurance between 2004 and 2006 (see Table A1).

**Figure A1: Percent of Uninsured Washington Residents by Year**

Point Estimate Surrounded by 95% Confidence Interval



**Table A1: Estimated Rate of Uninsured, Confidence Intervals, and Significance Test for Total Population**

	Estimated Rate of Uninsured	95 % Confidence Interval	
		Low	High
2004	9.9	9.1	10.7
2006	9.3	8.5	10.1
Wald Chi-Square P value		0.302	

A Wald Chi-Square P value <.05 indicates that there is a statistically significant change across years

<sup>5</sup> Data cited are from the 2004 (v04) and 2006 (v02) Washington State Population Surveys. More information about the surveys is available at: <http://www.ofm.wa.gov/sps/default.asp>.

Figure A2 shows the percentage of uninsured Washington residents by year and family income as a percentage of the Federal Poverty Level (FPL). In 2006, 23.1 percent of the population with family incomes between 0 and 99 percent of the FPL were uninsured, 16.6 percent of the population with family incomes between 100 and 199 percent of the FPL were uninsured, 9.3 percent of the population with family incomes between 200 and 299 percent of the FPL were uninsured, and 3.5 percent of the population with family incomes at or above 300 percent of FPL were uninsured. Table A2 shows that all of the change in uninsured rates by FPL between 2004 and 2006; are statistically insignificant with the exception of the rate for those Washington residents between 200 percent and 299 percent of the FPL. Between 2004 and 2006, the percentage of Washington residents with incomes between 200 percent and 299 percent of FPL who were uninsured dropped 2.9 percentage points from 12.2 percent in 2004 to 9.3 percent in 2006.

Figure A3a shows the percent of Washington residents with employer or union based health insurance. The employer or union based health insurance estimates for 2004 and 2006 were 61.1 percent and 62.5 percent respectively. Table A3a shows the results of the Wald chi-square test indicating that there was no statistically significant change between 2004 and 2006 in the percentage of Washington residents with employer based insurance.

Figure A3b shows the percent of Washington residents with various insurance types by year. In 2006, 11.1 percent of Washington residents purchased their own health insurance, 13 percent had health insurance through Medicare, and 15.6 percent had health insurance through Medicaid and/or Basic Health. Table A3b shows that there was a statistically significant change in the rate of privately purchased insurance, but rates of Medicare and Medicaid/BH showed no statistically significant change. Between 2004 and 2006 the rate of privately purchased insurance declined by 1.3 percentage points from 12.4 percent in 2004 to 11.1 percent in 2006.

Figure A4 shows the percent of uninsured Washington residents by year and age group. The estimate for the uninsured among those aged 0 to 18 was 4.4 percent in 2006, a 1.5 percentage point drop from 2004. However, looking at Table A4, the p-value for the Wald chi-square tests is .073. Since the p-value is not less than .05, there is not enough evidence to reject the null hypothesis that the two rates (4.4 and 5.9) are the same.

The 2004 and 2006 estimates of the uninsured for working aged adults (19-64) and elderly (65 and older) were similar. The p-values in Table A4 show that the 2006 estimates are not significantly different from the 2004 estimates.

Figure A2: Percent of Uninsured Washington Residents by Year and Family Income as a Percentage of the Federal Poverty Level (FPL)

Point Estimate Surrounded by 95% Confidence Interval

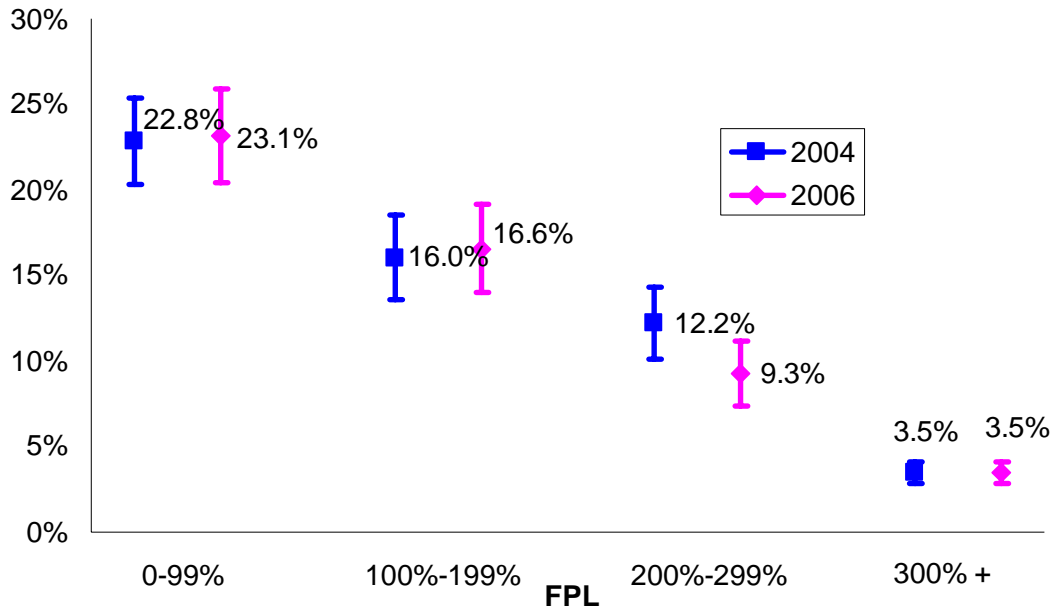


Table A2: Estimated Rate of Uninsured, Confidence Intervals, and Significance Tests by Family Income as a Percentage of the Federal Poverty Level (FPL)

FPL		Estimated Rate of Uninsured	95 % Confidence Interval	
			Low	High
0-99%				
	2004	22.8	20.3	25.4
	2006	23.1	20.4	25.9
	Wald Chi-Square P value	0.87		
100%-199%				
	2004	16.0	13.6	18.5
	2006	16.6	14.0	19.1
	Wald Chi-Square P value	0.76		
200%-299%				
	2004	12.2	10.1	14.3
	2006	9.3	7.4	11.2
	Wald Chi-Square P value	<b>0.04</b>		
Over 300%				
	2004	3.5	2.8	4.1
	2006	3.5	2.8	4.1
	Wald Chi-Square P value	0.99		

A Wald Chi-Square P value <.05 indicates that there is a statistically significant change across years. A bolded value indicates that there is a statistically significant change across years.

# Figure A3a: Percent of Washington Residents with Employer or Union Based Health Insurance by Year

Point Estimate Surrounded by 95% Confidence Interval

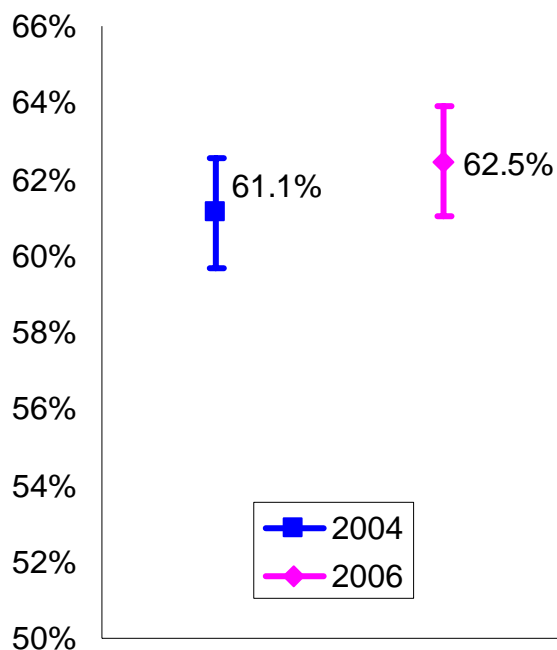


Table A3a: Estimated Rate of Employer Based Insurance, Confidence Intervals, and Significance Test for the Total Population

	Estimated Rate of Insurance	95 % Confidence Interval	
		Low	High
2004	61.1	59.7	62.6
2006	62.5	61.0	63.9
Wald Chi-Square P value		0.198	

A Wald Chi-Square P value <.05 indicates that there is a statistically significant change across years

Figure A3b: Percent of Washington Residents with Various Health Insurance Types by Year

Point Estimate Surrounded by 95% Confidence Interval

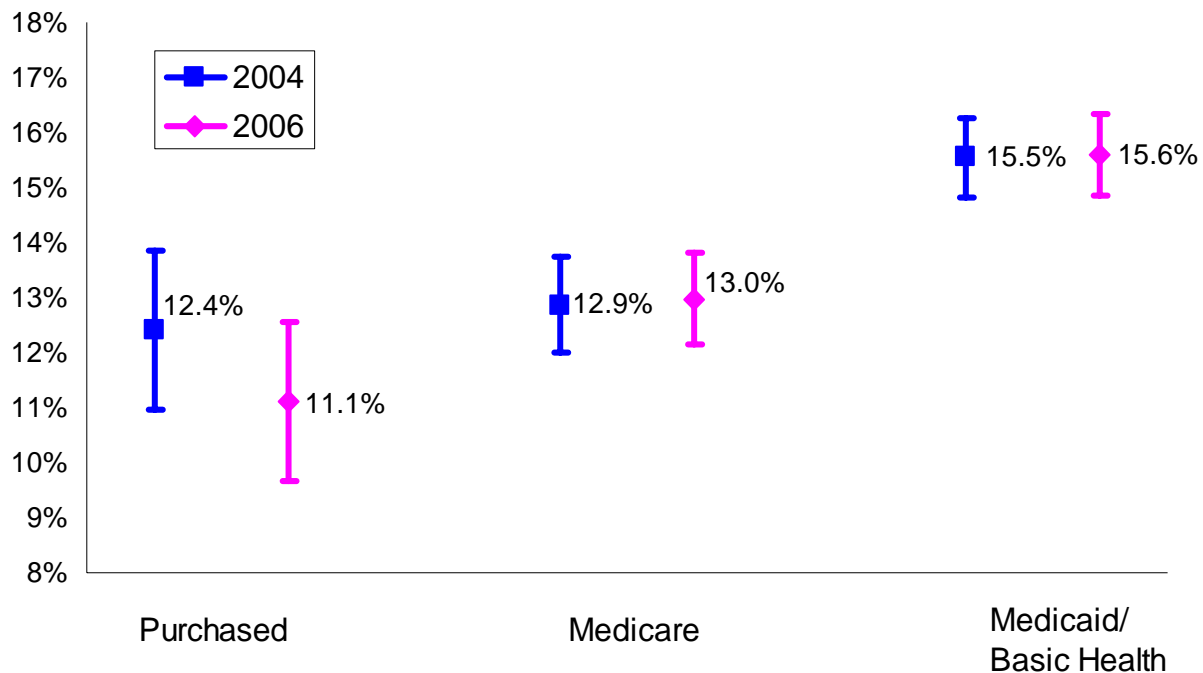
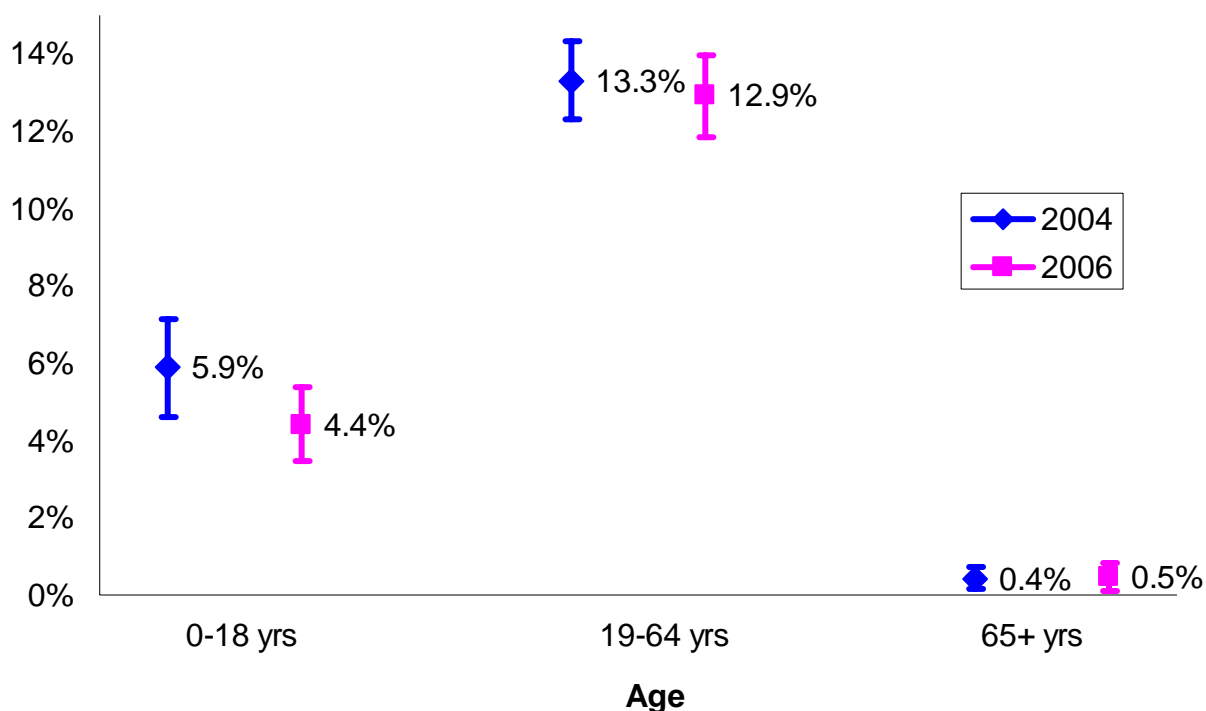


Table A3b: Estimated Rate of Privately Purchased, Medicare, and/or Medicaid/BH Insurance, Confidence Intervals, and Significance Tests for the Total Population

	Estimated Rate of Insurance	95 % Confidence Interval	
		Low	High
Privately Purchased			
2004	12.4	11.5	13.3
2006	11.1	10.3	11.9
Wald Chi-Square P value	0.04		
Medicare			
2004	12.9	12.1	13.6
2006	13.0	12.2	13.7
Wald Chi-Square P value	0.84		
Medicaid/BH			
2004	15.5	14.5	16.6
2006	15.6	14.4	16.8
Wald Chi-Square P value	0.93		

A Wald Chi-Square P value <.05 indicates that there is a statistically significant change across years. A bolded value indicates that there is a statistically significant change across years.

**Figure A4: Percent of Uninsured Washington Residents by Year and Age Group**  
 Point Estimate Surrounded by 95% Confidence Interval



**Table A4: Estimated Rate of Uninsured, Confidence Intervals, and Significance Test by Age Group**

Age		Estimated Rate of Uninsured	95 % Confidence Interval	
			Low	High
0-18				
	2004	5.9	4.6	7.1
	2006	4.4	3.5	5.4
	Wald Chi-Square P value	0.073		
19-64				
	2004	13.3	12.3	14.3
	2006	12.9	11.9	14.0
	Wald Chi-Square P value	0.58		
65+				
	2004	0.4	0.2	0.7
	2006	0.5	0.1	0.8
	Wald Chi-Square P value	0.90		

A Wald Chi-Square P value <.05 indicates that there is a statistically significant change across years